UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 13/274,314 | 10/15/2011 | Alkiviadis Simitsis | 82775152 | 3220 |

56436 7590 01/25/2017
Hewlett Packard Enterprise
3404 E. Harmony Road
Mail Stop 79
Fort Collins, CO 80528

| EXAMINER | |
|---|---|
| CHEN, YU | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2613 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 01/25/2017 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

hpe.ip.mail@hpe.com
chris.mania@hpe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* ALKIVIADIS SIMITSIS
and WILLIAM K. WILKINSON

---

Appeal 2015-008226
Application 13/274,314
Technology Center 2600

---

Before CAROLYN D. THOMAS, JEREMY J. CURCURI, and JOHN R. KENNY, *Administrative Patent Judges*.

CURCURI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 22, 23, 24, and 26. App. Br. 5. We have jurisdiction under 35 U.S.C. § 6(b).

Claims 22, 23, 24, and 26 are rejected under 35 U.S.C. § 103(a) as obvious over Saillet (US 2008/0012859 A1; Jan. 17, 2008) and Faraday (US 2004/0263537 A1; Dec. 30, 2004). Final Act. 20–22, 32–35.

We affirm-in-part.

## STATEMENT OF THE CASE

Appellants' invention relates to information integration. Spec. ¶ 2. Claim 22 is illustrative and reproduced below, with the disputed limitation emphasized:

> 22. A method comprising:
>
> applying a transition, with a processing unit, to an initial information integration flow graph to form a modified information integration flow graph, the information integration flow graph having nodes, each node having initial location coordinates for visual depiction in an initial design canvas; and
>
> modifying, with the processing unit, the initial design canvas to automatically form and visibly depict a modified design canvas in response to changes to the initial information integration flow graph by the applied transition, wherein the processing unit modifies the initial design canvas based upon the initial location coordinates of the nodes of the initial design canvas so as to reduce the number of nodes of the initial design canvas that have modified location coordinates in the modified design canvas *wherein the processing unit modifies the initial design canvas to form the modified design canvas by reducing a length of an edge connecting adjacent nodes*.

## ANALYSIS

### *Claim 22*

The Examiner finds Saillet and Faraday teach all limitations of claim 22. Final Act. 32–33; *see also* Ans. 2–3. The Examiner finds Saillet teaches the disputed limitation. Final Act. 32–33 (citing Saillet ¶ 77). Saillet (¶ 77) discloses, when adjusting other objects in a large graph to accommodate a local modified object, "a function is preferably chosen which decreases the norm of the translation vector when the distance to the modified object increases."

Appellants present the following principal arguments:

i.

> [T]he norm of the translation vector in Saillet is computed by a function of the difference of the radius of the modified object or the distance of each other object to the modified object (Saillet, Paragraph [0072]). As clearly shown by Figures 3 and 8 below, Saillet does **not** disclose that the length of an edge connecting adjacent nodes is reduced.

App. Br. 8–9; *see also* App. Br. 10, Reply Br. 3–4.

ii. "The portion of Saillet cited by the Examiner addresses increasing or decreasing the size of an object in a graph. However, this solution for addressing the enlargement of an object in a graph is largely irrelevant to the application of a transition to an information integration flow graph." App. Br. 10; *see also* Reply Br. 2–3.

We are persuaded by the Examiner that Saillet teaches the disputed limitation.

Regarding Appellants' argument (ii), Saillet's Figure 7 does depict enlargement of an object 704a in the graph. That said, Saillet's technique in paragraph 77 is applicable to accommodate a *modified* object, and is not limited to enlargement of an object. *See* Saillet ¶ 77. Saillet (¶ 55) discloses "this algorithm . . . reacts to a local modification of the graph (i.e., resizing, adding or removing an object)." Thus, we find Saillet discloses use of the technique of paragraph 77 to accommodate addition of an object, *i.e.*, applying a transition. *See also* Saillet ¶ 86 (adding a new object may be treated as enlarging an object having zero size).

Regarding Appellants' argument (i), we find Saillet's technique of paragraph 77 discloses the disputed limitation of claim 22: "wherein the processing unit modifies the initial design canvas to form the modified design canvas by reducing a length of an edge connecting adjacent nodes." In reaching our conclusion, we emphasize that a length of an edge connecting adjacent nodes is reduced when Saillet's technique of paragraph 77 is applied to a graph in which an object is added. For example, in Saillet's Figure 3, adding an object (*see* Saillet ¶ 55) between object 302 ("A") and object 304 ("B") and applying Saillet's relayout technique (*see* Saillet ¶ 77) reduces a length of the edge connecting object 304 ("B") and object 306 ("C") because the translation vectors for object 304 ("B") and object 306 ("C") are in the same direction, while the norm of the translation vector for object 306 ("C") is less than the norm of the translation vector for object 304 ("B").

We, therefore, sustain the Examiner's rejection of claim 22.

*Claim 23*

Claim 23, in pertinent part, recites:

> [W]herein the nodes of the initial design canvas comprise a chain of the nodes, the chain comprising a first node having first location coordinates on a first end of the chain and a second node having a second location coordinates on a second end of the chain, wherein the modified design canvas comprises the chain with an additional node between the first node and the second node, wherein the first node maintains the first location coordinates in the modified design canvas and wherein the second node maintains the second location coordinates in the modified design canvas.

The Examiner finds Saillet and Faraday teach all limitations of claim 23. Final Act. 33; *see also* Ans. 4–5. The Examiner finds Saillet teaches the pertinent part of claim 23. Final Act. 33 (citing Saillet ¶¶ 55, 77). Saillet

(¶ 77) discloses, when adjusting other objects in a large graph to accommodate a local modified object, "a function is preferably chosen which decreases the norm of the translation vector when the distance to the modified object increases." Saillet (¶ 55) discloses adding an object to a graph.

Appellants present the following principal argument:

"Paragraph [0077] of Saillet fails t[o] disclose a chain of nodes, wherein the addition of a node between two nodes at opposite ends of the chain does not alter location coordinates of the nodes at the opposite ends of the chain." App. Br. 11–12. "Paragraph [0077] is describing how the graph is adjusted in response to the **enlargement** of an object, NOT the addition of another object within a chain of objects." App. Br. 12; *see also* Reply Br. 4–5.

We are persuaded by the Examiner that Saillet teaches the pertinent part of claim 23.

For reasons discussed above when addressing claim 22, we find Saillet discloses use of the technique of paragraph 77 to accommodate addition of an object. *See* Saillet ¶¶ 55, 77; *see also* Saillet ¶ 86 (adding a new object may be treated as enlarging an object having zero size). Further, we find Saillet paragraph 77's disclosure of "not having to move, or reposition the objects far away from a modification in large graphs having numerous objects" teaches maintaining location coordinates of the nodes at the opposite ends of the chain when a node is added. Thus, we find Saillet's disclosures teach the pertinent part of claim 23.

We, therefore, sustain the Examiner's rejection of claim 23.

*Claim 24*

Claim 24, in pertinent part (emphasis added), recites:

> [W]herein the processing unit determines how to modify the initial design canvas to automatically form and visibly depict the modified design canvas so as to *minimize* the number of nodes in the initial design canvas that have modified location coordinates in the modified design canvas.

The Examiner finds Saillet and Faraday teach all limitations of claim 24. Final Act. 34; *see also* Ans. 5–6. The Examiner finds Saillet teaches the pertinent part of claim 24. *See* Final Act. 21–22 (citing Saillet ¶ 55); *see also* Ans. 5–6 (citing Saillet ¶ 77).

Appellants present the following principal argument:

"Saillet discloses that ONLY the outermost, most distant objects from the enlarged object have the same normal translational vector [*sic*]. In contrast, Appellants method preserves, to the extent possible, location coordinates of even local nodes." App. Br. 13; *see also* Reply Br. 6–7.

We are persuaded by the Examiner that Saillet teaches the pertinent part of claim 24.

Appellants' Specification (¶ 108) discloses:

> [T]he application of a transition to a flow graph results in modification of only a portion of the nodes of the flow graph rather than all the no[d]es of the flow graph. Instead of drawing the modified flow graph from scratch; optimizer 34 maintains the original drawing and make[s] appropriate changes on top of it.

In light of Appellants' Specification, a broad but reasonable construction of "minimize the number of nodes in the initial design canvas that have modified location coordinates in the modified design canvas" includes modifying a portion, but not all, of the nodes of the flow graph.

This claim construction comports with the plain meaning of "minimize" which in the pertinent sense is: "**1 :** to reduce or keep to a minimum." MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 741 (10TH ED. 1997).

Thus, we find Saillet paragraph 77's disclosure of "not having to move, or reposition the objects far away from a modification in large graphs having numerous objects" reasonably discloses minimizing the number of nodes in the initial design canvas that have modified location coordinates in the modified design canvas because a portion, but not all, of the nodes of the flow graph are modified. *See* Saillet ¶ 77.

We, therefore, sustain the Examiner's rejection of claim 24.

*Claim 26*

Claim 26, in pertinent part, recites: "wherein the processing unit modifies the initial design canvas to automatically form and visibly depict the modified design canvas based upon a predetermined sensitivity value defining a minimum spacing between adjacent nodes."

The Examiner finds Saillet and Faraday teach all limitations of claim 26. Final Act. 34–35; *see also* Ans. 6–7. The Examiner finds Saillet teaches the pertinent part of claim 26. Final Act. 34–35 (citing Saillet ¶ 72); *see also* Ans. 6–7 (norm of translation vector defines recited minimum spacing). Saillet (¶ 72) discloses "The norm of each [translation] vector is computed by a function of the computed difference of radius of the modified object and, optionally, the distance of each other object to the modified object."

Appellants present the following principal argument:

"Establishing a set value is not equivalent to establishing a minimum value. In fact, as Saillet's objective is to preserve the relative positioning between its objects, the norm of the vector is clearly not a minimum value." App. Br. 14; *see also* Reply Br. 7–8.

We are persuaded by Appellants that the Examiner erred in finding Saillet teaches the pertinent part of claim 26.

Saillet (¶ 72) discloses computation of the norm of the translation vector. Saillet (¶ 77) discloses adjusting other objects in a large graph to accommodate a local modified object in accordance with the calculated norm of the translation vector. In short, Saillet's norm is the magnitude of the translation—not a minimum spacing between adjacent nodes.

We, therefore, do not sustain the Examiner's rejection of claim 26.

ORDER

The Examiner's decision rejecting claims 22, 23, and 24 is affirmed.

The Examiner's decision rejecting claim 26 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED-IN-PART